

COMPUTER TECHNOLOGY

Units of Credit: Semester (.5)

CIP Code: 520417

Prerequisite: Basic keyboarding skills

COURSE DESCRIPTION

An introduction to computer application software that encompasses document processing, spreadsheets, and presentations. An understanding of ethics and use of operating systems, information resources, and electronic mail is included. Skills gained will be demonstrated by creating a project for a different content area.

CORE STANDARDS

STANDARD 0000-01	Students will enhance keyboarding skills
OBJECTIVE 0101	Students will use correct keyboarding technique to improve speed and accuracy. This includes the following: <ul style="list-style-type: none">• eyes on copy or screen, not on keys• fingers curved and oriented to home row• correct fingers used for keystrokes• key with smooth rhythm and quiet hands• forearms parallel to slant of keyboard; wrists low but not resting on any surface• proper sitting posture: body centered, feet provide balance elbows naturally at sides
STANDARD 0000-02	Students will develop knowledge of computer basics and use an operating system.
OBJECTIVES 0201	Review the history of computer technology, progression to systems of today, types of computers used in a variety of settings, and trends for the future.
0202	Identify the major components of microcomputers in the following categories and determine how each contributes to a computer's performance: <ul style="list-style-type: none">• Hardware including: system unit, microprocessor, RAM, ROM, storage devices, input devices, output devices, peripheral devices.• Software for operating systems and software for applications including: consideration of platform, icons, menus, specialized tasks, and multitasking.
0203	Describe how a computer functions including: boot process, input, data processing, and output.
0204	Describe networks: LAN, WAN
0205	Become familiar with <i>General Computer Terminology</i> available through the <i>Teacher Helps</i> link. http://www.usoe.k12.ut.us/ate/Skills/bus/250.htm
0206	Identify viruses and destructive programs. Understand the importance of vigilance in their detection, prevention, and repair.
0207	Create, copy, move, rename, and delete files and folders.
STANDARD 0000-03	Students will apply document-processing skills. Each student will be able to use the following when creating a letter, memo, report, or other business document:
OBJECTIVES 0301	Retrieve, edit, save, and print a document.
0302	Include textual citations and references (bibliography) in a report.
0303	Insert text files, graphics, or other objects into an existing document.
0304	Change margins, text alignment, line spacing, tabs, indents, move, copy, and page setup.
0305	Change the typeface and emphasis (font, underscore, italics, and boldface) of existing text.

0306	Proofread and correct all language mechanics errors (grammar, spelling, punctuation, and word usage) in an existing document with the aid of a spell checker, grammar checker, and thesaurus.
STANDARD 0000-04	Students will create spreadsheets and manipulate data. Each student will be able to perform the following tasks:
OBJECTIVES 0401	Create, retrieve, modify, format, save, and print a spreadsheet.
0402	Copy, move, insert, and delete data.
0403	Insert and delete columns and rows.
0404	Calculate with formulas (+, -, *, /) and simple functions (sum, average).
0405	Sort data.
0406	Create, save, retrieve, print and interpret a chart (graph).
STANDARD 0000-05	Students will demonstrate an understanding of ethics related to computer technology. Each student will be able to demonstrate an understanding of the following topics:
OBJECTIVES 0501	Copyright and license law regarding software, database contents, Internet publications, and other published materials.
0502	Ethics relating to posting and citing Internet information resources.
0503	The role of an Acceptable Use Policy.
0504	Rights of privacy, property, intent, and accessibility with respect to computer-based information.
STANDARD 0000-06	Students will access on-line information resources. Each student will be able to perform the following tasks:
OBJECTIVES 0601	Use the alphabetical browse and keyword search functions, including Boolean operator (AND, OR), of a library on-line catalog to find author, title, and subject information.
0602	Download Internet resources stored at World Wide Web sites.
0603	Evaluate the quality of information on web sites (i.e., compare conflicting sites, assess the site's legitimacy, identify bias in a web site's content).
STANDARD 0000-07	Students will successfully use electronic mail (email). Using his/her own account, each student will be able to perform the following tasks:
OBJECTIVES 0701	Use a personal email account to send, receive, reply to, and forward email messages.
0702	Send a file (word processing document, graphic, etc.) as an attachment to an out-going message.
0703	Receive and open an attachment to an email message.
STANDARD 0000-08	Students will create an electronic presentation. The presentation should include the following items:
OBJECTIVES 0801	A variety of slide layouts.
0802	Transitions and automatic timing.
0803	Graphics and text.
0804	Proofread and correct all language mechanics errors (grammar, spelling, punctuation, and word usage) in the presentation.
STANDARD 0000-09	With the cooperation of a teacher in a different content area, students will create and implement an integrated project.
OBJECTIVES 0901	Students will use any or all of the following in a project to be presented for grading to the Computer Technology teacher and a cross-curricular teacher: document processing, spreadsheet, electronic presentation.